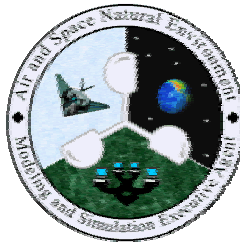
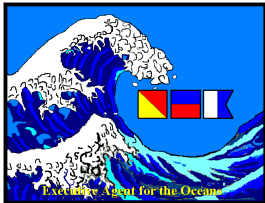




<http://www.aesmry.com/esg/>

Environmental Scenario Generator (ESG) IPR 5-17-00

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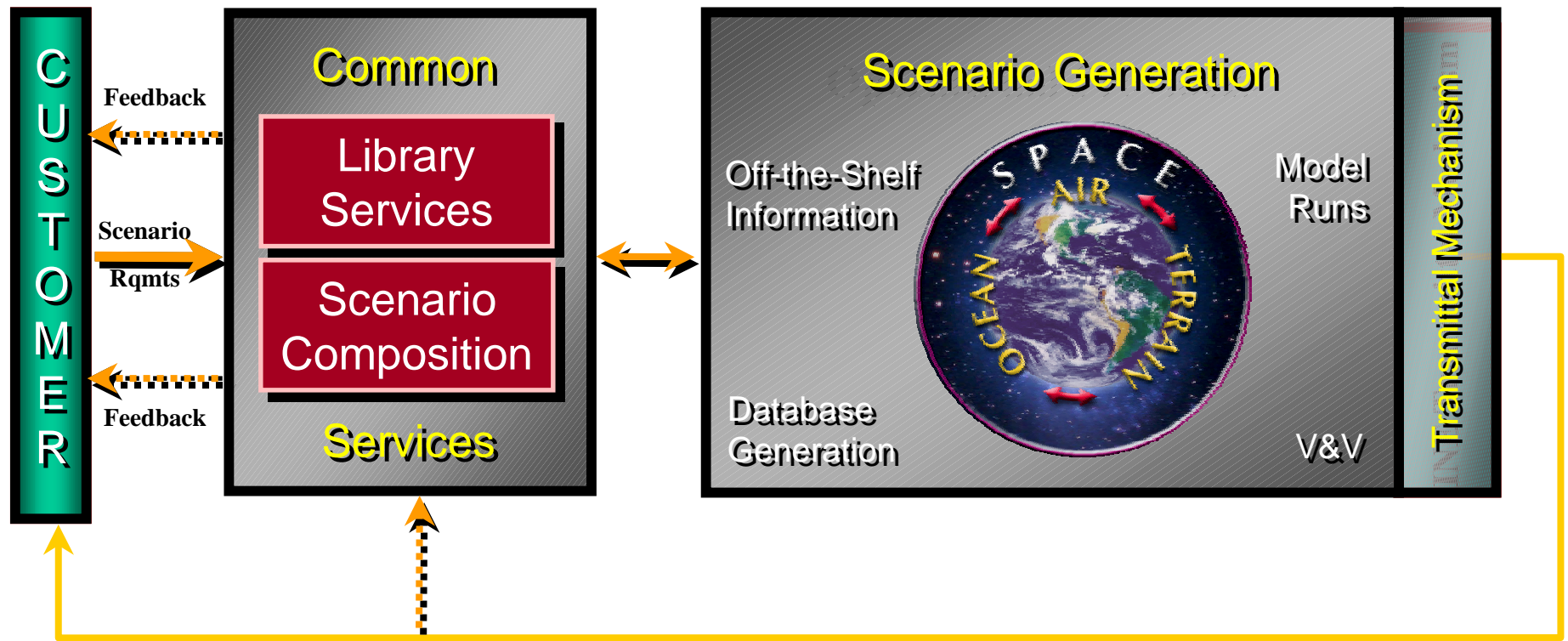


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INE CONOPS

The Challenge

Create a physically consistent, cross-domain authoritative “ground truth” of the natural environment that meets user requirements



What is ESG?

ESG provides the M&S User:

- **A customizable client interface to translate scenario requirements into specific environmental data requests**
- **Data mining capabilities to identify potential environmental events that meet those scenario requirements**
- **Automated environmental scenario generation based on the data and modeling resources within the MEL**

ESG seeks to achieve:

- **Consistent integration of atmosphere, ocean, space, and terrain scenario data components**
- **Efficient and transparent use of available data and modeling resources**

Software Development Plan

ENVIRONMENTAL SCENARIO GENERATOR

Year 2000 Software Development Plan

PURPOSE:

- **To establish Management's approved plan for developing software items and other activities under the ESG project.**
- **To provide a common "road-map" for subsequent efforts.**
- **To provide a tool to monitor progress and processes.**

SCOPE:

- **The current version of the Software Development Plan applies to the Year 2000 activities only. It should be reviewed and updated as required, to maintain its currency.**

ENVIRONMENTAL SCENARIO GENERATOR

Year 2000 Software Development Plan

YEAR 2000 STRATEGY:

- Objectives vs Requirements
- Performance vs Design-based
- Components vs Configuration Items
- Use of Developmental Configuration
- Use of Software “Builds” vs “Releases”
- Less Formal Testing and Documentation
- CY 2000 Goal is a Developmental Baseline

ENVIRONMENTAL SCENARIO GENERATOR

Year 2000 Software Development Plan

YEAR 2000 SOFTWARE COMPONENTS:

- Data Mining Component
 - Local Data Server (LDS) Component
 - Customer Interaction Component
 - Order Server Component
 - Just-In-Time (JIT) Server Component
-
- **Each of these Year 2000 Software Components were discussed in detail during the ESG Software Design Review on 11-12 April 00.**

ENVIRONMENTAL SCENARIO GENERATOR

Year 2000 Software Development Plan

YEAR 2000 SOFTWARE BUILDS:

- **Build 1 – Initial (limited) data mining, JIT and visualization capabilities; initial application of SEDRIS tool for GRIB to SEDRIS data format conversion; non-automated request translation, coordination and tracking features; a Web-based High-Level Client.**
- **Build 2 – All Build 1 capabilities in Build 1 plus an initial JIT production capability for Space data, more Atmospheric JIT transforms, a Customer Requirements Interface, and an automated GRIB to SEDRIS data format conversion.**
- **Build 3 – All Build 1 and 2 capabilities plus additional JIT and data mining capabilities, definition of software interfaces and objects, and Customer Requirements Interface enhancements.**

ENVIRONMENTAL SCENARIO GENERATOR

Year 2000 Software Development Plan

CURRENT SCHEDULE:

- Year 2000 Design/Progress Review #2 Held – **11-12 Apr 00**
- Year 2000 Software Build 1 Approved – **12 Apr 00**
- Develop Year 2000 Software Build #2 – **Apr - Aug 00**
- Hold Year 2000 Progress Review #3 – **Aug 00**
- Approve Year 2000 Software Build #2 – **Aug 00**
- Develop Year 2000 Software Build #3 – **Jul - Dec 00**
- Hold Year 2000 Progress Review #4 – **Oct 00**
- Approve Year 2000 Software Build #3 – **Dec 00**

Updated Year 2000 ESG Plan of Action & Milestone (POA&M) Schedule

ID	Task Name	LEAD	2000				2001				2002				2003			
			Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4		
1	ESG PROJECT MANAGEMENT	ESGMAN	10/19 10/19															
2	Conduct Year 2000 ESG Progress Review #1	ESGMAN	10/19	10/19														
3	Develop Draft Year 2000 ESG Software Development Plan	MAR/SAIC	11/15		1/28													
4	Review Draft Year 2000 ESG Software Development Plan	ESGMAN		1/31	2/18													
5	Revise Draft Year 2000 ESG Software Development Plan	MAR/SAIC		2/22	2/25													
6	Review Revised Year 2000 ESG Software Development Plan	ESGMAN		2/28	3/3													
7	Finalize Year 2000 ESG Software Development Plan	MAR/SAIC		3/6	3/10													
8	Approve Final Year 2000 Software Development Plan	ESG PM		3/17	3/17													
9	Develop Draft Year 2000 ESG POA&M Schedule	MAR/SAIC	11/15		1/28													
10	Review Draft Year 2000 ESG POA&M Schedule	ESGMAN		1/31	2/18													
11	Revise Draft Year 2000 ESG POA&M Schedule	MAR/SAIC		2/22	2/25													
12	Review Revised Year 2000 ESG POA&M Schedule	ESGMAN		2/28	3/3													
13	Finalize Baseline Year 2000 ESG POA&M Schedule	MAR/SAIC		3/6	3/10													
14	Approve Baseline Year 2000 ESG POA&M Schedule	ESG PM		3/17	3/17													
15	Conduct Year 2000 ESG Progress Review #2	ESGMAN		4/11	4/13													
16	Conduct Year 2000 Software Design Review	ESGMAN		4/11	4/13													
17	Develop Draft ESG Test Plans and Procedures	MAR		4/27	5/12													
18	Review Draft ESG Test Plans and Procedures	ESGMAN		5/8	5/12													
19	Finalize ESG Test Plans and Procedures	MAR		5/15	5/19													
20	Approve Final ESG Year 2000 Test Plans/Procedures	ESG PM		5/18	5/18													
21	Develop Draft ESG Configuration Management Plan	MAR		5/22	6/2													
22	Review Draft ESG Configuration Management Plan	ESGMAN		6/5	6/9													
23	Finalize Baseline ESG Configuration Management Plan	MAR		6/12	6/15													
24	Approve Baseline ESG Configuration Management Plan	ESG PM		6/16	6/16													
25	Conduct Year 2000 ESG Progress Review #3	ESGMAN			8/1	8/3												
26	Conduct Year 2000 ESG Progress Review #4	ESGMAN				10/17	10/19											

FY00 Milestones

	FY00				FY01			
	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Jan-Feb	Mar-Apr
Software	Build #1		Build #2		Build #3		Ver1.0	
		◆			◆		◆	◆
Conferences	AMS	MiniMORS	ID '00	MORS	STC	SIW	I/ITSEC	
	◆	◆	◆	◆	◆	◆	◆	
Meetings	PMR	IPR	INE	IPR	IPR	IPR		
	◆	◆	◆		◆	◆		

FY00 Assessment

- **Early Focus:**
 - Software components integrated to support web client interface (B1)
- **Focus for Rest of Year:**
 - Development of resources (space, ocean)
 - Restructure and generalize SW components for INEARP transition
 - Research scenario composition/interface issues
- **Collaboration:**
 - MEL, SEDRIS, IE, EF II, ECDM & EBS (for FY01 effort)
 - Possible: TEDS, DIOPS, DEI, AMSO EDB, DTRA MDS & HPAC
- **Exercise Support:**
 - EF II, IE, Global 2000, (JTASC)
 - Feedback on ESG
 - Learning opportunity re scenario composition